

AMENDMENTS TO THE CLAIMS

1-15. (Cancelled)

16. (Currently Amended) A method for infusing a fluid in a living body, said method comprising:

providing a reservoir, a flow restrictor, and a valve in an implantable drug pump device;

transiently storing ~~[[a]]~~ fluid infusate in said reservoir for transmission to a delivery site after the implantable drug pump device has been implanted in a patient;

limiting a flow rate of the fluid infusate using said flow restrictor disposed in a fluid path between said reservoir and said delivery site;

determining transient pressure differentials relative to said flow restrictor by a controller component of the implantable drug pump;

determining whether an occlusion is present in the flow path using the transient pressure differentials, the transient pressure differentials being determined when the controller component closes a valve to interrupt flow of the fluid infusate from the implantable drug pump device; and

determining a location of an occlusion when an occlusion is detected using the transient pressure differentials;

controlling said valve disposed in said fluid path between said reservoir and said delivery site to control infusate output from said reservoir to said delivery site as a function of said transient pressure differentials across said flow restrictor, wherein the controlling said valve automatically responds to a detection of ~~an~~ a partial occlusion by altering a unit dose period for delivery of the fluid infusate;

communicating a signal, from implantable drug pump device to an external device, that is indicative of an amount of occlusion detected by the controller; and

communicating a signal, from implantable drug pump device to an external device, that is indicative of a location of the occlusion.

17. (Previously Presented) The method of claim 16, wherein controlling said valve comprises:

subdividing a flow period into smaller unit dose periods over which a pressure differential across said flow restrictor is likely to remain constant and controlling said valve to deliver a total dose of said infusate through a series of ~~sequential~~ said unit dose periods.

18. (Original) The method of claim 17, wherein said unit dose periods are selected at least in part to reduce battery consumption.

19. (Original) The method of claim 17, wherein said unit dose periods are selected so that an open/close rate of said valve is pharmacologically insignificant.

20. (Previously Presented) The method of claim 16, further comprising:
providing an alert with respect to overfilling of said reservoir using a pressure differential across said flow restrictor.

21. (Previously Presented) The method of claim 16, further comprising:
providing an alert with respect to depletion of said reservoir using a pressure differential across said flow restrictor.

22. (Previously Presented) The method of claim 16, further comprising:
determining a rate at which a pressure differential across said flow restrictor changes.

23. (Previously Presented) The method of claim 22, wherein controlling said valve comprises:

altering timing of a period of said valve being opened as a function of said rate at which a pressure differential across said flow restrictor changes.

24. (Original) The method of claim 16, further comprising:
determining a temperature of said infusate, wherein controlling said valve comprises controlling infusate output from said reservoir as a function of said temperature of said infusate.

25-34. (Cancelled)